

Jacob Fork Section

The overall master plan for the Jacob Fork section of the park is illustrated in Figure 26. Enlargements of specific areas for more detailed review are included in following figures.

Circulation and Park Access

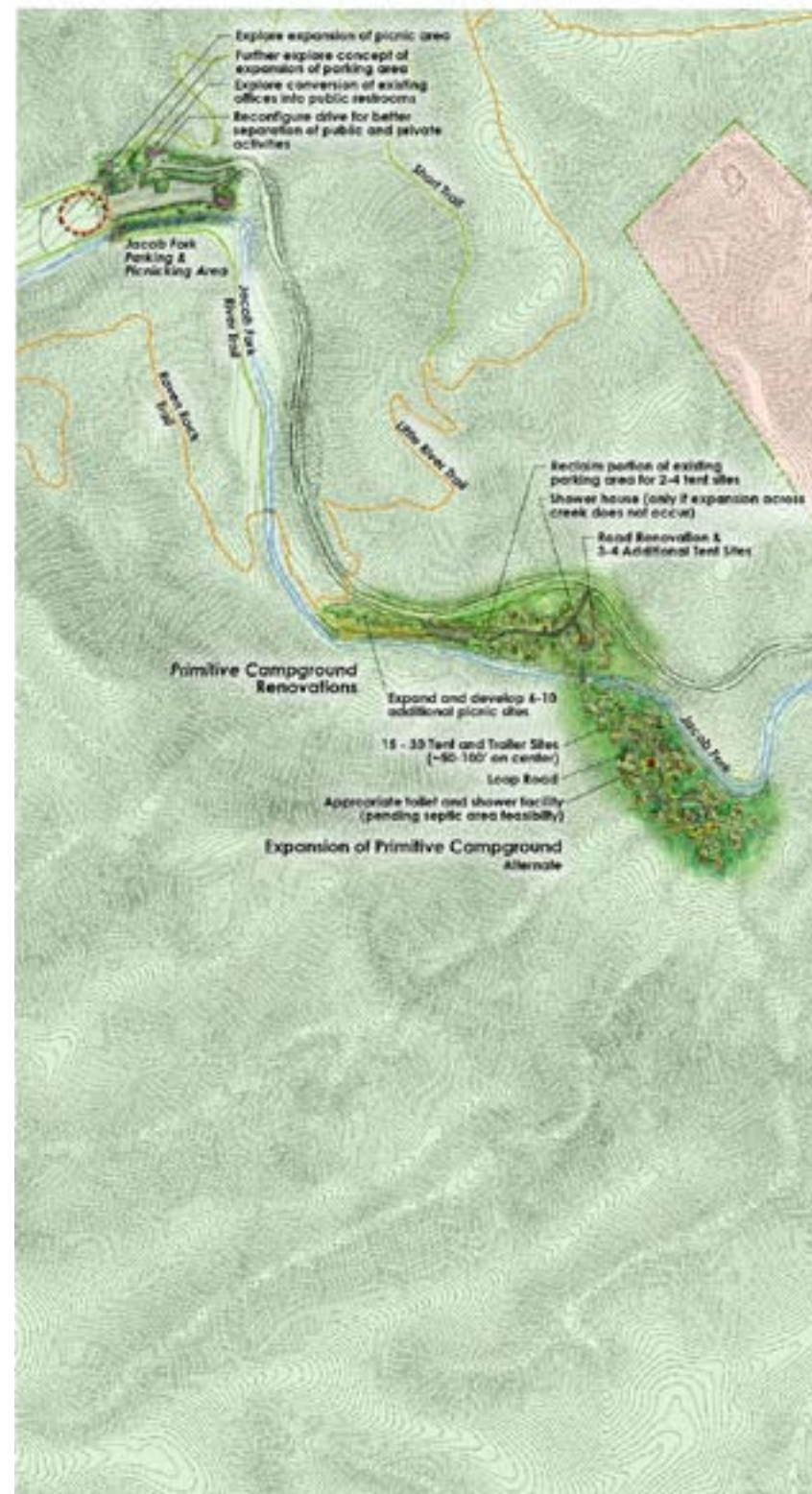
The Jacob Fork section of the park is accessed along South Mountain Park Avenue, described in more detail in the Roads and Utility Inventory earlier in this document and illustrated in Figure 26.

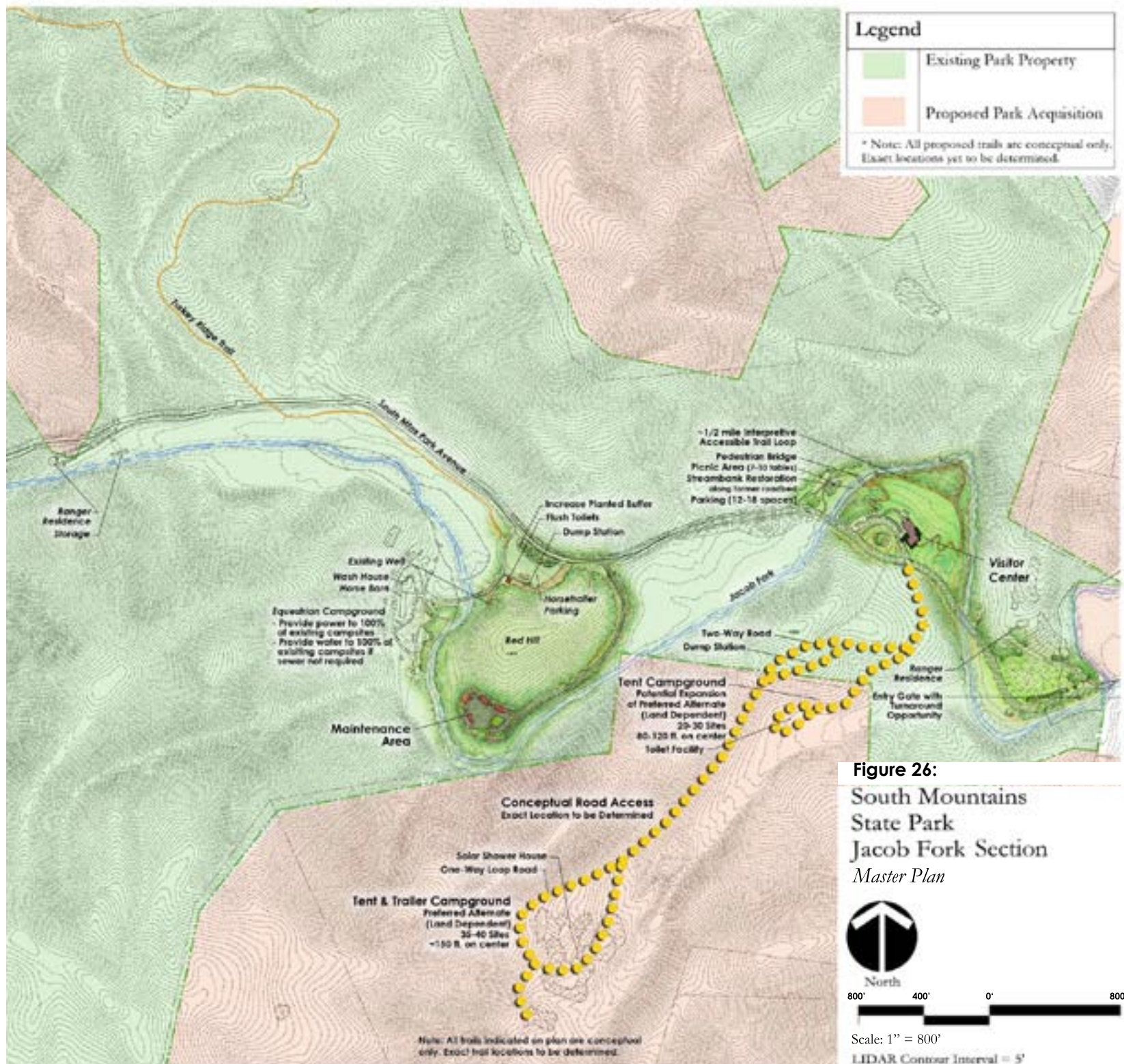
The point of entry to the park currently is through a gate just to the east of the easternmost bridge in the vicinity of the visitor center and the first ranger residence as one enters the park. A new entry gate will be built just to the west of the existing ranger residence driveway, providing a turnaround opportunity for after hours and relieving the current safety issue of multi-point turns at the gate. This entry gate will include stone columns and a new park sign feature.

Three bridges carry South Mountain Park Avenue over Jacob Fork. All bridges appear to be in good condition. These bridges were



Future stream restoration area





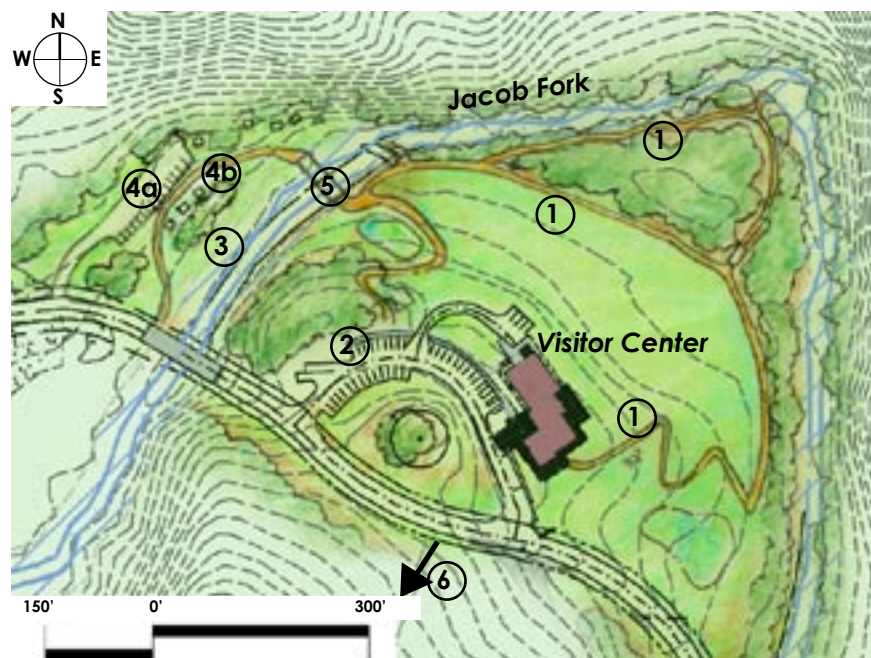


Figure 27: Visitor Center and Vicinity

designed for vehicular access only, not providing separate passage for pedestrians crossing the stream on the bridge.

Visitor Center Interpretive Trail

Figure 27 illustrates the master plan recommendations in the vicinity of the South Mountains State Park Visitor Center.

An approximately ½-mile interpretive trail, proposed to meet Americans with Disabilities Act (ADA) guidelines, will originate at the visitor center, providing several different experiences for the hiker as it winds through a meadow, woodland edge, woodland interior, and stream side to the north of the center. Wayside exhibits will help interpret the trail. This short trail system will provide a convenient and accessible trail, allowing the user to experience a little of what the park has to offer in a short time period.

This paved trail ① will begin at the visitor center porch and wind down the grade to the area by the current erosion control basin.



Portion of visitor center parking area

This basin area will be converted into an educational opportunity with modification into a stormwater filtration basin. The visitor can then learn about the types of native plants and filtration systems that protect Jacob Fork. The trail will split towards a woods edge trail and a stream side trail, eventually looping back up towards the northern portion of the parking area, returning the visitor back to the visitor center.

Visitor Center Parking Expansion

As was described in the Roads and Utility Inventory earlier in this document, the visitor center currently has 35 paved parking spaces for the use of the public, a lower lot providing five staff parking spaces, and four bus parking spaces ②.

Once the exhibit hall opens in the visitor center, the need for additional parking in this area is anticipated. Additional parking in direct connection with the existing parking lot is not considered feasible at this time due to several constraints. These primary constraints include the existence of steep slope banks between the visitor center and Jacob Fork, as well as the presence of a large white oak tree, fairly centrally located within the existing parking area, which was preserved through the construction of the center. This tree is beginning to show signs of stress.



Large Oak protected during visitor center construction

If this tree degrades to such a point that it requires removal, some opportunity may exist for additional parking in this area, as well as realignment of the road adjacent to the tree.

Visitor Center Area Stream Bank Restoration

Stream bank restoration and stabilization of the old road bed near the visitor center was addressed in the 1995 environmental assessment for the construction of the visitor center. It is recommended that this restoration ③ be undertaken in order to protect the water quality of Jacob Fork and to discourage further foot traffic on unstable stream banks in the area. Figure 27 illustrates this area for restoration. This area of repair is one of the few places along the Jacob Fork which is in need of restoration.

Visitor Center Picnic Area and Park Connectivity

Additional parking (12-18 spaces) ④a and a picnic area (7-10 tables) ④b will be located on a shallow sloped area on the northwest side of Jacob Fork to the northwest of the visitor center. Figure 27 illustrates this area. The location for this picnic and parking area is suitable for this use because of its easy access off of the main park road, the reasonable topography, and its proximity to both the river and the visitor center.

A strict buffer to Jacob Fork will be maintained in this area (minimum of 50 feet) to protect the stream during and after construction of this parking and picnic area.

A pedestrian bridge ⑤ across Jacob Fork would afford a safer connection from the picnic area to the visitor center via the proposed interpretive trails than would otherwise be available on foot across the vehicular bridge along South Mountain Park Avenue. It is recommended that the park have an engineer evaluate the bridge abutments from the former road in this location for their reuse as a pedestrian stream crossing.

A hiking trail connection to link this proposed picnic/parking area and the existing park trails that begin at the current horsetrailer parking area will be evaluated through a comprehensive trails assessment and is recommended if it is feasible.

New Tent and Trailer Campground (Land-Dependent Preferred Alternate)

A tent and trailer campground ⑥ is proposed on a tract being considered for acquisition, located to the southeast of Red Hill, and across South Mountain Park Avenue from the visitor center (illustrated in Figures 26 and 27). This proposed tent and trailer campground is the preferred alternate to the existing primitive campground expansion, described later in this section, due to the location's proximity to the visitor center, providing for simpler wayfinding, and its protection of Jacob Fork due to no need for a stream crossing. Site selection also is based upon the relatively flat, selectively cleared land that is not prone to flooding compared to other flat, undeveloped land in the vicinity of South Mountain Park Avenue. Additionally, it has good access to the main park road. The campground will be intended to continue the park's theme of campsites with a backcountry character.

This proposal includes two camping areas: the primary camping area is proposed as a larger tent and trailer campground, based around a loop road, in an already selectively cut open area; expansion to this area is proposed over time as a smaller tent campground, also based around a loop road, and adjacent to a natural draw.

The proposed tent and trailer campground would provide for 35-40 sites. The sites would provide a sense of privacy and backcountry character through spacing at approximately 150 feet on center.

Each campsite would have a tent pad, picnic table, lantern hook, and fire ring. The majority of sites would likely be accessed by backup space parking, sized to accommodate a vehicle and trailer. A percentage of the sites would be designed to accommodate pull-throughs for longer trailers and large rigs.

These facilities will require potable water. If a new well is cost prohibitive, access from the visitor center well via pump will be explored.

It is preferred that 100 percent of the sites in this campground loop have individual access to potable water. However, if sewer hookup is required by code for any site that has water, spigots scattered at regular intervals throughout the loop will be used to provide potable water. At least one site should be provided with a sewer hookup.

Electricity would be desirable at all sites in this loop. Solar energy or other renewable energy options both for heating water and providing electricity should be explored whenever possible.

Providing trail access from this new campground to Raven Rock Trail is recommended.

A sewer dump station is proposed along the road that would lead to the new tent and trailer campground.

New Tent Campground

(Land-Dependent Potential Expansion of Preferred Alternate)

A land-dependent small tent campground is proposed as a future expansion to the land-dependent tent and trailer campground (refer to Figure 26). Pending further ecological analysis of this site, if it is deemed unfeasible, the expansion of the primitive campground across Jacob Fork as a tent and trailer campground will be considered.

This land-dependent expansion alternate would likely provide for 20-30 tent sites approximately 80-120 feet on center. It is proposed to contain a toilet facility appropriate to its final determined size. Water would be provided by spigots scattered at regular intervals throughout the site. Electricity would be provided as a centralized amenity.

Maintenance Area

Figure 28 illustrates the location and schematic layout for the Jacob Fork maintenance area. Site selection for this maintenance area in the Jacob Fork section of the park was based on reasonable topography for the programmed use of the space, a location behind Red Hill out of view of South Mountain Park Avenue, and a somewhat central location to the rest of the developed park area off the main park road. The designated area is comprised of approximately one and one-quarter acres. Access to the maintenance area will be constructed primarily on an existing old road bed in order to minimize impact to surrounding trees and slopes in the area.

This maintenance area ⑦ will be enclosed by security fencing and will include two 40 feet by 100 feet buildings. One of these buildings will be a warehouse building and mechanic shop including a vehicle lift. The other building will include offices, restroom facilities with a universally-designed emergency shower station, and a carpentry shop.

An equipment storage shed also is included in the program for the maintenance area. This shed will have five bays, similar to the shed at Raven Rock State Park. The shed will be covered, with no side walls.

Three small metal storage buildings will be relocated and reused from existing locations within the park. These buildings are approximately 16 feet by 20 feet and can be sited on blocks, but do require vehicular access from the entry drive.

The site also will include an outdoor vehicle wash area, encompassing up to 15 feet by 20 feet. This area will be covered and have direct access to a hand-held hose. Wash water will be delivered to the septic area through an oil/water separator.

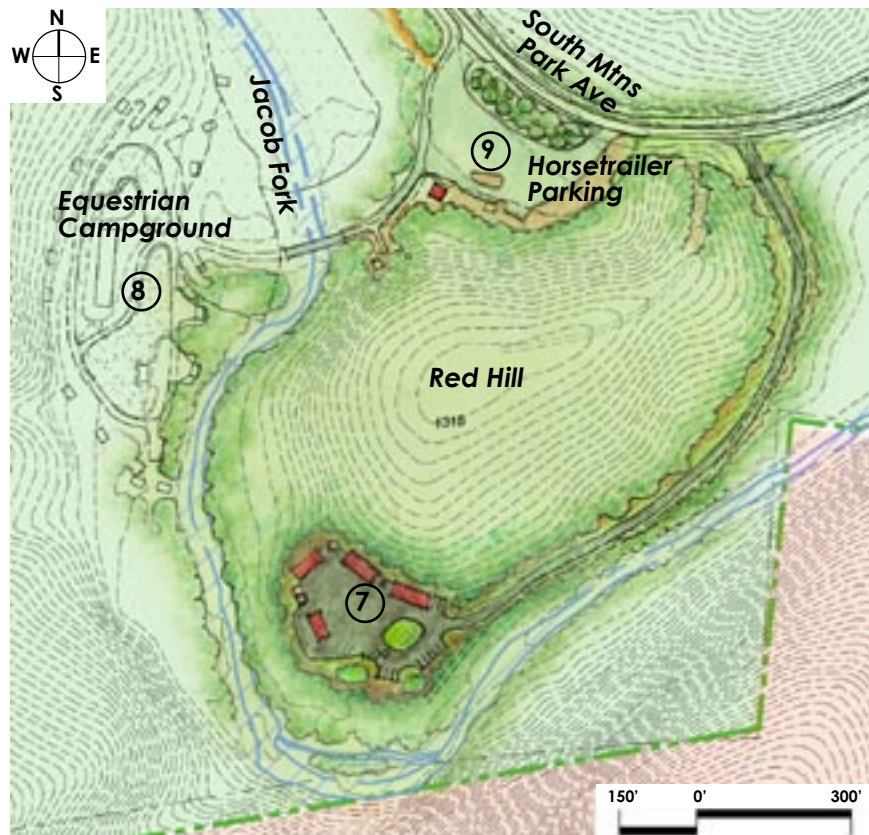


Figure 28: Maintenance Area and Equestrian Areas

The site also will include a 100-gallon used oil storage bin, a six-bay vehicle storage shed (~24 feet by 50 feet), 10 to 12 paved parking spaces, and above-ground 1,500-gallon gas and 500-gallon diesel pumps that are concrete encased and 5 feet from any building at a minimum. Drive access to the site will be designed to accommodate tractor trailer access.

The site will require electric, water, phone, and wastewater utilities. Electric may be trenched during construction under the entry drive from South Mountain Park Avenue. It is recommended that the park explore renewable energy options for this project. The well at the equestrian parking area may be appropriate as a potable water supply. An appropriate septic area will be defined for the site

prior to construction, and will be sized appropriately to accommodate restrooms and equipment wash runoff.

Stormwater runoff will be directed through a filtering system, including an oil/water separator where appropriate, in order to cleanse the water prior to it entering the groundwater or surface waters of the site.

The site will be appropriately buffered from adjacent land uses, including the existing equestrian campground. Impervious surface will be kept to a minimum. The site's proximity to the sensitive waters of Jacob Fork will require extreme care and sensitive planning through the next phases of design to protect this water. A minimum 50-foot buffer will be maintained between any construction on newly impacted areas of this site and Jacob Fork. The existing old road bed that will be used for access to the site may encroach on this 50-foot buffer. Additional precautions will be taken in these areas during construction in order to minimize impacts to Jacob Fork.

Existing Equestrian Campground

Figure 28 illustrates the location and context of the existing equestrian campground and horsetrailer parking. The equestrian campground consists of 15 campsites. Based on needs expressed to park staff by existing users of this campground ⑧ as well as public comment received through this master planning process, electricity will be provided to all of the existing equestrian campsites.



Equestrian campground

Water in this campground currently is provided by spigots scattered through the site. If code does not require the provision of septic hookup for any site with water hookup, it is recommended that potable water be provided to each campsite.

Existing Horsetrailer Parking Area

The existing horsetrailer parking area (refer to Figure 28) provides approximately three-quarters to one acre of area for parking, excluding circulation around the vicinity of the area. This parking area currently is unmarked.

Improvements will be made to the planted buffer between the horsetrailer parking area ⑨ and South Mountain Park Avenue to help screen the large parking area from the entry road and to provide shade opportunities at the edge.

Currently, the parking area is serviced by two pit toilets. These will be upgraded to flush toilets, pending identification of an appropriate area for septic treatment.

A dump station will be provided in this parking lot. It will be designed for clear and safe access and to minimize impact on existing parking capabilities of the lot.

Existing Primitive Campground Renovation

Figure 29 illustrates the recommendations for the renovations and expansion of the existing primitive campground as well as the area surrounding the Cicero Branch parking area.

The existing primitive campground is located on the south side of South Mountain Park Avenue, adjacent to Jacob Fork. It currently has eleven campsites, two pit toilets, and two water spigots.

The Cicero Branch parking lot formerly was used for horsetrailer parking. Since the completion of the horsetrailer parking lot along South Mountain Park Avenue to the east of this facility, this lot has not been fully utilized. Therefore a portion of the eastern end of this parking area will be renovated into two to four new primitive camp sites ⑩a.

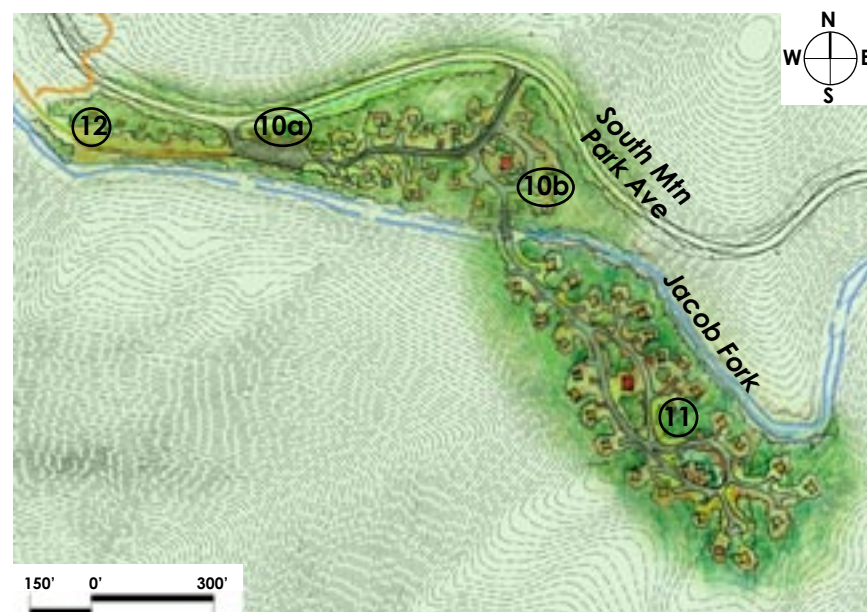


Figure 29: Existing Primitive Campground and Vicinity

The current facility also will be renovated on its eastern end by renovation of the road and addition of three to four new primitive camp sites ⑩b, while respecting Jacob Fork to the south.

This campground is proposed to contain a shower house. Water and electricity will remain as a centralized amenity in this campground.

Existing Primitive Campground Expansion for Tent and Trailer (Alternate)

A land-dependent proposal for a new tent and trailer campground was described earlier in this section. If that new campground is found to be unfeasible, this alternate will further expand and improve the existing primitive campground with a new tent and trailer campground ⑪.

This proposal will require one stream crossing of Jacob Fork. This will be provided by a bridge with both vehicular and pedestrian access.

Based on available space, the site may have the potential for 15 to 30 campsites spaced 50 to 100 feet on center along several loop roads. Special attention will be paid to minimizing impacts on Jacob Fork's water quality during the construction stages of this project.

The site is proposed to contain a toilet facility appropriate to its final determined size. Potable water should be provided by spigots scattered at regular intervals across the site. Electricity should be provided at each campsite.

Other Picnicking Opportunities

The Jacob Fork picnic areas are in very high demand. Additional picnic areas in the park that are in good proximity to the river and adjacent to safe and convenient parking will help relieve the demands and pressure on the Jacob Fork picnic areas and parking.

Therefore, the picnic area adjacent to the Cicero Branch Parking area will be expanded ⑫. It is estimated that six to ten new picnic sites will be possible to the north of Raven Rock Trail in the vicinity of its trailhead in this parking area. This picnic area expansion is illustrated in Figure 29.

Jacob Fork Parking Area and Picnic Area (Alternate)

The Jacob Fork parking area is the terminus of South Mountain Park Avenue, and it provides access to a number of trailheads into the park. Therefore, parking spaces in this area do not meet demand during busy weekends. Park usage continues to increase. Expansion and improved circulation patterns in this parking area could help to alleviate the heavy demands on this parking lot. Land to the west of the parking area, currently used for picnicking, is relatively flat, and could potentially support additional parking spaces. It is recommended that further evaluation be performed on the feasibility for expansion of parking facilities into this area ⑬ at the western end of the parking lot. Figure 30 represents the area

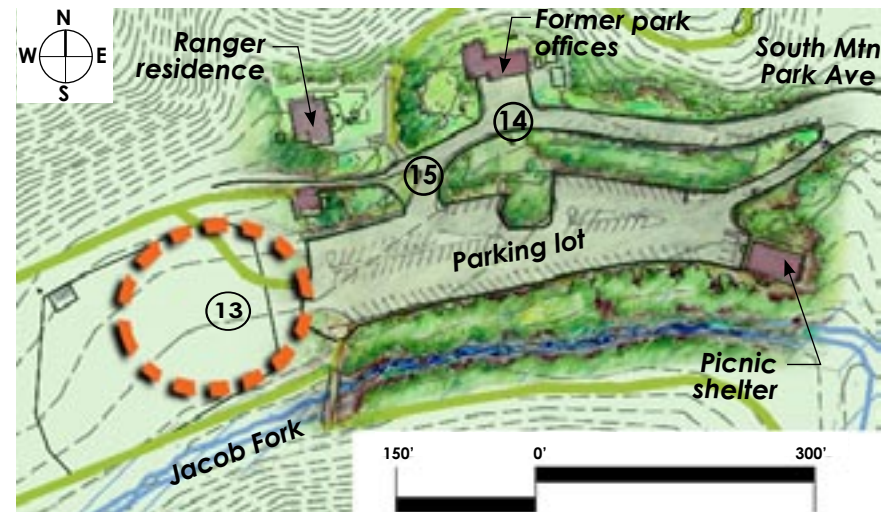


Figure 30: Jacob Fork Parking Area and Vicinity



Jacob Fork picnic area

recommended for improvement. An additional 30 to 40 spaces are recommended if feasible in this area.

The parking expansion would provide for more visual connection between the parking lot and the restroom facilities provided in the existing comfort station.

Several constraints in this area necessitate the recommended further evaluation, including the exact location of the septic area for the comfort station and, based on the amount of area deemed suitable for parking, evaluation of a suitable site for relocation of the displaced picnic facilities.

If this parking is deemed feasible, as with any development in the park, special attention must be given to buffering the parking from Jacob Fork, sedimentation and erosion control during construction, as well as water quality treatment of any runoff from the new parking lot prior to its entry into the creek post-construction.

Re-Use of Former Park Office Building

An architectural review of the former park office was performed as a part of this master planning process. The review is included in Appendix I.

Based on staff needs, the workshop area of the former park office building ⑭, located to the north of the Jacob Fork parking area, will be utilized for emergency/maintenance equipment parking and



Former park office building

storage. The architectural review of this building identified this as a compatible use.

The existing toilet building is located approximately 350 feet from the primary parking. This distant location has caused confusion for park visitors in the past, resulting in unnecessary disturbance at the nearby existing ranger residence and former park office. Further architectural study will be performed to evaluate the potential to renovate the former park office building for public restrooms. Evaluation for septic feasibility will also be required.

The area in front of and in the vicinity of this building will be further evaluated for its potential to provide additional parking area.

Separation of Activities

The ranger residence located at the end of the Jacob Fork parking area was built as a private residence in the 1950s. It is not an ideal location for a ranger residence, since its proximity adjacent to the Jacob Fork parking area, as well as its driveway configuration, lead to an inadequate separation of activities in this area (see Figure 30). If a new appropriate location for this residence can be identified, it is recommended that the residence be moved from this location in the future. In the meantime, the residence's driveway from the parking area will be reconfigured for more clear delineation of private and public space, and additional evergreen plantings will be provided for screening for the parking area ⑮.



Ranger residence adjacent to Jacob Fork parking area